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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,744	10/05/2001	Marcel P. Bruchez	5100-0702	4380
20855	7590 03/10/2005		EXAM	NER
ROBINS & PASTERNAK 1731 EMBARCADERO ROAD SUITE 230			DO, PEN	ISEE T
			ART UNIT	PAPER NUMBER
PALO ALTO	, CA 94303		1641	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	A - ti- ation No	Applicánt(a)			
•	Application No.	Applicant(s)			
	09/972,744	BRUCHEZ ET AL.			
Office Action Summary	Examiner	Art Unit			
	Pensee T. Do	1641			
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	ith the correspondence address			
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication  - If the period for reply specified above is less than thirty (30) days, and the communication of the period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by some and the period for reply will, by some and the period for reply will be set or extended period for reply will, by some and the period for reply will, by some and the period for reply will be set or extended	ON. FR 1.136(a). In no event, however, may a n. a reply within the statutory minimum of thi eriod will apply and will expire SIX (6) MOI statute, cause the application to become A	reply be timely filed  ty (30) days will be considered timely.  NTHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 1	17 December 2004.				
-					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) ☑ Claim(s) 1-73 is/are pending in the applica 4a) Of the above claim(s) 16-73 is/are with 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) 1-15 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	drawn from consideration.				
Application Papers					
9)☐ The specification is objected to by the Exar	miner.				
10) The drawing(s) filed on is/are: a)	☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.				
Applicant may not request that any objection to		` '			
Replacement drawing sheet(s) including the co	•				
Priority under 35 U.S.C. § 119					
12) ☐ Acknowledgment is made of a claim for form     a) ☐ All b) ☐ Some * c) ☐ None of:         1. ☐ Certified copies of the priority document of the priority document of the certified copies of the application from the International But * See the attached detailed Office action for a second of the certified copies of the application from the International But * See the attached detailed Office action for a second of the certified copies of the application from the International But * See the attached detailed Office action for a second of the certified copies of the priority document of the certified copies of	nents have been received. nents have been received in A priority documents have been reau (PCT Rule 17.2(a)).	Application No received in this National Stage			
Attachment(s)					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>		Summary (PTO-413) s)/Mail Date			
<ul> <li>Notice of bransperson's Fatern brawing Kertew (170-940)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SE Paper No(s)/Mail Date 3/4/03 &amp; 10/15/02.</li> </ul>	<i>'</i>	nformal Patent Application (PTO-152)			

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#### **DETAILED ACTION**

#### Election/Restrictions

Applicant's election without traverse of December 17, 2004 in the reply filed on group I, claims 1-15 is acknowledged.

### Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: **extracellular** and **intracellular** semiconductor nanocrystal,

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8 and 9 are indefinite for reciting an intracellular semiconductor nanocrystal and an extracellular semiconductor nanocrystal respectively. Because the specification fails to describe what an intracellular and extracellular semiconductor nanocrystal are, these claims are indefinite since these are not well-known in the art.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4-7, 10-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Barbera-Guillem (US 6,194,213).

Barbera-Guillem teaches a human T lymphocyte cell labeled at the membrane with functionalized nanocrystals comprised CdSe/ZnS (core/shell) or multilabeled with nanocrystals and a fluorescent. The nanocrystals are semiconductor nanocrystals comprising a CdSe core and a ZnS shell and may further comprise a dopant (fluorescence property) such as rare earth metal or a transitional metal. (see col. 3, line 55-col.4, line 10; col. 5, line 38-col. 6, line 23; examples 2, 3).

Claims 1-3 6, 7, 10-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Bawendi et al. (US 6,306,610).

Bawendi teaches a composition comprising fluorescent semiconductor nanocrystals associated to a molecule such as cells, prokaryotic or eukaryotic. The semiconductor nanocrystals comprise a CdSe core and a ZnS shell. The composition is also associated with cell membranes. (see col. 3, line 60-col. 4, line 62; col. 19, lines 58-60; col. 20, lines 51-59; col. 29, lines 41-42).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pensee T. Do whose telephone number is 571-272-0819. The examiner can normally be reached on Monday-Friday, 7:00-3:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pensee T. Do Patent Examiner February 28, 2005

CHRISTOPHER L. CHIN PRIMARY EXAMINER GROUP 1800-76 Y7

Christan L. Chin